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THE SILVER INSTITUTE LETTER

WORLDWIDE INFORMATION ON SILVER

VOLUME XVI NUMBER 6 DECEMBER 1986

US MINT PROJECTS 1986 SALES OF 5 MILLION AMERICAN EAGLE PURE SILVER BULLION COINS

On November 19 the U.S. Mint received a forecast of "intense interest in the first silver bullion coins ever to be offered by the US Mint — the new American Eagle Silver Bullion Coins," *pictured at right.*

These coins contain one ounce of 999 fine silver, making them the "most silver" silver coins ever produced by the mint.

And on the date of issuance, November 24, the Mint's authorized purchasers ordered *all* of the 1,400,000 American Eagle Silver Bullion Coins made available by the US Mint. They paid the spot price of silver plus $1.

As a result of market forecasts and the sell out of its initial supplies, the Mint has increased its production from 4,000,000 to **5,000,000 Silver Eagles to be offered to the public in 1986,** "with additional coins available thereafter."

"The American Eagles have landed, and they're here to stay," commented Donna Pope, Director of the US Mint. She added that the Mint is taking the steps necessary to satisfy the "coin investment community's intense demand" for the one-ounce silver coins.

These steps include putting into service additional coin presses at its San Francisco facility and producing the silver coins at the Denver Mint as well.

No official figures on 1987 production have yet been released, though the Mint is required by law to produce enough Silver Eagles to meet public demand.

Silver Eagles are available to the public at coin shops, precious metal dealers, participating banks, and brokerage firms.

STERLING SILVER, SHINING STAR OF THE HOLIDAYS

The peal of sterling silver bells has added a joyous note to both the religious and festive aspects of the Holiday Seasons for many centuries. This year, once again, young buyers are buying a traditional holiday bell for their homes.

At **Bailey Banks & Biddle,** Chestnut & 16 Street, Philadelphia, PA 19102-5592, the store offers its annual sterling silver "Christmas Bell" for $40 or its traditional Hand & Hammer sterling silver Santa Claus ornament, *pictured at left,* for $39.

Or, if you would like to decorate your tree with a pure silver (999+ fine) Christmas Angel ornament ($39.50) — or your love, with an 18th century England pure silver "Endless Knot of Love" pendant ($39.50), they can be ordered from **Sunshine Bullion Co.,** 8350 N. Central, Suite M-1070, Dallas, TX 75206-1602.

But holiday displays of silver products are not limited to silver bells and ornaments.

In Florida the chain of **Burdines** (22 E. Flagler St., Miami, FL 33131) upscale department stores offer sun-tanned ladies in Miami, W. Palm Beach, Orlando, Ft. Lauderdale, Clearwater, and St. Petersburg the opportunity of choosing from a wide selection of beautiful bold shapes of sterling silver collars, necklaces, cuffs, and link bracelets priced between $49 and $292.

And in New York City, elegant debutantes shop at **Tiffany & Co., Gucci, Saks 5th Avenue, Lord & Taylor,** and **Fortunoff** for a limitless assortment of highest quality sterling silver designer collections of jewelry and accessories for the holiday season.

As Kae McCulloch, fashion consultant to the Jewelry Industry Council said, **"Sterling Silver is Making a Strong Fashion Statement. . ."** Indeed it is!

WORLD SILVER MINE PRODUCTION DECREASING

The Silver Institute's annual report, **Mine Production of Silver,** covering the period of 1985 through 1989, shows a decrease in world output of silver from 430.2 million troy ounces in 1985 to a projected 420.7 million troy ounces in 1986.

Mine Production of Silver 1985-1989 is based on reports from 242 leading mining and related entities in 58 countries. It includes 1985's real production and projections for 1986, 1987, 1988, and 1989 for each of the silver mining countries of the world.

The world's largest producer of silver in 1985 was Mexico with 69.2 million troy ounces, followed by: Peru, Soviet Union, Canada, USA, and Australia. In 1986 this ranking will remain the same except that the USA and Australia will exchange places.

Mine Production of Silver 1985-1989, including the names of the companies that cooperated in its preparation, is available from the Silver Institute, 1026 Sixteenth Street, N.W., Suite 101, Washington, DC 20036 for *only* $15 for North America and $18 elsewhere.

TREASURY SECRETARY NOTES IMPORTANCE OF US'S FIRST SILVER BULLION COIN

During the ceremonial first strikes of the silver American Eagle bullion coins at the US Assay Office in San Francisco on October 29, the Secretary of Treasury, James A. Baker III, noted the importance of the Silver Eagle by saying, "Silver has always been — and always will be — one of America's great natural resources. My predecessor, Alexander Hamilton, the first Secretary of the Treasury, was so convinced of silver's importance that he argued forcefully for its use as a standard for all US money."

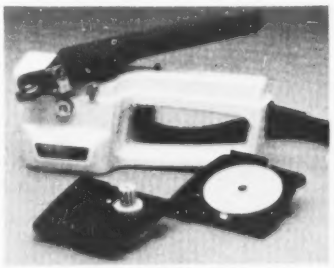
Baker continued, **"The production and distribution of the American Eagle silver bullion coin will benefit us all.** It is, after all, a brand new use for our American silver. It will provide investors and consumers with an opportunity to invest their hard-earned dollars in a product that keeps money working in our domestic economy.

"And it provides investors with a high quality silver coin that is a source of pride and enjoyment, not just for the owner, but for the generations of young people who will inherit what we produce and understand its importance in our country's history."

MORE SILVER USED IN MANUFACTURING PLASTICS

A significant part of what is called "high technology" should really be called catalysis, and silver is an important catalyst.

As a catalyst, silver is the major material used to control chemical reactions that lead to the efficient and cost-effective creation of engineering plastics. **One of the chemicals that uses silver in its production is formaldehyde**— and over 800 million pounds of this important chemical building block are produced worldwide each year.



Formaldehyde, in turn, is used in the manufacturing of plastics such as DuPont's DELRIN. This plastic has an outstanding balance of desirable properties: in fact, DELRIN has replaced metals in many important mechanical and structural applications.

DELRIN's tensile strength, high fatigue endurance, corrosion resistance, and resilience for applications requiring springiness and toughness, makes it ideal for gears, as shown in the picture of an electrical can opener, for bearings, pump impellers, marine hardware, telephone terminal strips, chemical sprayers, automotive switches, plumbing fittings and clothes dryers operating at temperatures up to 180°F (82°C).

During 1985, over 2.4 million troy ounces of silver were used worldwide for the manufacture of chemical building blocks needed to make plastics. Silver represents a signficant proportion of the $2.5 billion per year catalyst market, a market which is expected to double in size by the turn-of-the-century.

NEW BOOK ON THE MINING INDUSTRY

A new book, "Trouble in the Third Kingdom," has been written by Simon D. Strauss, the first President of The Silver Institute and retired Executive Vice President of the American Smelting and Refining Company (ASARCO). The title of the book refers to the tradition of classifying all objects as pertaining to one of the three kingdoms — animal, vegetable, or mineral. The book endeavors to explain the sweeping changes and major trends in the minerals industry over the past years. The book may be ordered from Susan Riggs, *American Metal Market*, 7 East 12th Street, New York, NY 10003, for only $35.00 plus $.94 postage and handling.

LATEST SILVER INSTITUTE REFINING STATISTICS

Production and Disposition of 999 Silver by All Known Refiners in the United States.

	TROY OUNCES		MILLION TROY OUNCES		
	OCTOBER 1986	SEPTEMBER 1986	Jan-Oct 1986	Jan-Oct 1985	Full Year 1985
THESE REFINERS' PRODUCTION, BY SOURCE			MONTHLY RATE		
From Primary (ores & concentrates)	2,194,827	2,974,750	2.7	4.2	4.1
From Coins	0	0	0.0	0.0	0.0
From Old Scrap (used photo film & other products)	1,970,343	1,593,891	2.2	2.5	2.5
From New Scrap (in-plant clippings, waste)*	3,703,841	2,363,771	2.2	2.1	2.4
TOTAL PRODUCTION	7,869,011	6,932,412	7.2	8.9	9.1
DISPOSITION BY THESE REFINERS					
Converted in Plant (consumed in fabricating, etc.)	5,066,776	3,325,530	3.9	3.3	3.8
Shipped Out as 999 Silver	3,311,650	3,081,673	3.2	5.8	5.6
TOTAL DISPOSITION	8,378,426	6,407,203	7.1	9.1	9.4
RESULTING CHANGE OF THESE REFINERS'			TOTAL FOR PERIOD		
STOCKS (Production Minus Disposition)	−509,415	525,209	0.8	−3.0	−3.8
THESE REFINERS' STOCKS AT END OF PERIOD	924,358	1,433,773	0.9	0.9	0.1

Production and Disposition of 999 Silver by All Known Refiners in Australia, Canada, Mexico, Peru, South Africa, Sweden, and West Germany; and some other Refiners in Europe and Asia.

	TROY OUNCES		MILLION TROY OUNCES		
	OCTOBER 1986	SEPTEMBER 1986	Jan-Oct 1986	Jan-Oct 1985	Full Year 1985
THESE REFINERS' PRODUCTION, BY SOURCE			MONTHLY RATE		
From Primary (ores & concentrates)	14,425,512	13,352,963	13.6	13.8	13.9
From Coins	16,830	385,039	0.3	0.1	0.1
From Old Scrap (used photo film & other products)	4,858,924	3,850,396	3.7	4.1	4.0
From New Scrap (in-plant clippings, waste)*	1,030,079	844,230	0.8	1.0	0.9
TOTAL PRODUCTION	20,331,345	18,432,628	18.3	18.9	18.9
DISPOSITION BY THESE REFINERS					
Converted in Plant (consumed in fabricating, etc.)	2,878,936	1,961,751	1.6	1.4	1.4
Shipped Out as 999 Silver	17,048,372	16,328,351	16.8	17.4	17.3
TOTAL DISPOSITION	19,927,308	18,290,102	18.4	18.8	18.7
RESULTING CHANGE OF THESE REFINERS'			TOTAL FOR PERIOD		
STOCKS (Production Minus Disposition)	404,037	142,526	−0.9	1.0	2.4
THESE REFINERS' STOCKS AT END OF PERIOD	6,844,228	6,440,191	6.8	6.3	7.7

*PRODUCTION From New Scrap is 999 silver made from in-plant clippings, spillage, sweeping, etc., generated during manufacturing processes.

THE SILVER INSTITUTE
A WORLDWIDE ASSOCIATION OF MINERS, REFINERS, FABRICATORS AND MANUFACTURERS
INCORPORATED 1971

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SUBSCRIBE TO "NEW SILVER TECHNOLOGY" TODAY!

In order to keep the academic and industrial communities informed of the most important new research on silver and its products, the Silver Institute has heavily subsidized the publication of the quarterly report, **New Silver Technology.**

To assure the highest level of quality of each issue of NST, over 1000 patents and reports published worldwide are studied by the Institute staff. The reader receives new information on silver alloys, brazes, batteries, catalysts, conductors, contacts, lubrication & bearings, medical uses, optical fibers, photography, sterlingware, tarnish and corrosion resistance, thin films, etc.

During the past 12 years, **NST has alerted its readers to many truly major break-throughs in silver technology. A few of these developments are listed below:**

- **Calculators,** April 1979 — Calculator market expanded by use of silver photovoltaic batteries that charge themselves by simple exposure to light.
- **Automotive Industry,** April 1982 — A silver catalytic converter greatly reduces emission of harmful pollutants from methanol-fueled automotive engines.
- **Batteries,** November 1979, Silver lithium batteries make longer lasting, more reliable cardiac pacemakers.
- **Contacts,** August 1983 — Highly flexible silver coatings were developed for use in the manufacture of silver membrane touch switches.
- **Automotive Safety,** February 1981 — Thin, transparent layers of silver enable electrically heated windows to quickly remove ice and snow from automobile windows.
- **Bio-Medical,** October 1985 — Silver halide glass fibers and laser beams combined to vaporize arterial obstructions leading to heart attacks. This should eliminate the need for "by-pass" surgery and permit the treatment of heart patients as outpatients.
- **Aerospace,** August 1982 — Faster rocket motors are produced by embedding heat-conducting silver wire in solid propellants.
- **Communications,** October 1982 — By using a silver electroconductive paste printed on both sides of unfired ceramic sheets, ceramic capacitors can be mass produced.

The Silver Institute now finds it impossible to maintain its current subsidy for NST. Cost analysis reveals that annual NST subscription rates must be raised to $275 and the number of subscribers must be increased if the NST is to survive. Our analysis also indicates that many subscribers would prefer a monthly publication which also contains a list of all new silver developments.

In view of the above, instead of supplying readers with 60 one-page summaries quarterly, the new NST starting in January 1987, will be published monthly, allowing the reader to gain immediate access to information of greatest interest.

NST will maintain the same high quality of its reports to subscribers. Each month subscribers will receive:

- Ten one-page summaries of the most important developments in silver technology;
- A listing of all new silver developments with references; and
- A reply card to enable subscribers to order complete backup patents or papers for $25 per item.

If NST is important to your company, please send in your order prior to January 15 because if we do not substantially meet our objectives by the end of January 1987, the Silver Institute, regretfully, will have to discontinue publication of this valuable technical resource.

You can help save the NST by subscribing to NST, renewing your old subscription and/or by giving the Silver Institute names and addresses of other executives or scientists who could benefit from a subscription to NST.

ORDER FORM FOR "NEW SILVER TECHNOLOGY"

Annual Subscription to New Silver Technology for 1987, US $275.
Attached is check for _____ subscriptions to New Silver Technology 1987, US $_____

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THE SILVER INSTITUTE LETTER

WORLDWIDE INFORMATION ON SILVER

VOLUME XVII NUMBER 1 FEBRUARY 1987

SILVER COINS BECOMING A MAJOR DEMAND FACTOR IN WORLD SILVER MARKET

Popular silver bullion coins include the Austrian Thaler (l.), 800 million of which have been struck since 1780; the *Mexican Libertad* (m.) 5 million of which have been sold since 1984; and the 1985 French *Emil Zola* coin (r.), where the 4 million issue was sold out.

By January 26th, the US Mint sold 5,811,000 troy ounces of silver in the form of brilliant new Silver Eagle bullion coins. If this pace is maintained throughout 1987, over 8.6 million ounces of silver will have passed from the national stockpile into the hands of the world's coin collectors and investors.

What chance is there that this will happen? A very good one if the 1986 record means anything.

Last year the US Mint proved itself capable of minting and selling 6.5 million ounces of silver in the shape of the very popular 90% silver Statue of Liberty dollars. And in the closing weeks of 1986, it *minted and promptly sold* an additional *5.1 million* one ounce Silver Dollar bullion coins.

This brought US usage of silver in coinage up to 11.6 million troy ounces which is *more* than the total used in 1985 by the following US industries: dental & medical (1.5 million ounces), batteries (2.5), electroplated wire (3.7) and sterling ware (3.5).

However, *if* silver is positioned correctly, its usage in coinages can be dramatically increased. For example, in 1963 when the word "silver" meant "real money", over 111 million ounces were used in the minting of US silver dollars and other lesser coins.

But appreciation of silver coins is not limited to US coin collectors and investors. For example, since 1976, **France** has used 41.1 million ounces of pure silver in the minting of commemorative silver coins. *Each issue was sold out mostly to local collectors and investors.*

In the same ten year period, **Austria** used 27.6 million troy ounces of pure silver in the minting of beautiful and interesting commemorative silver coins and restrikes of the world's first silver bullion coin—the Maria Theresa Thaler. *Austrians assured a sell-out of the commemorative issues, and the world's investors took care of the Thalers.*

And in **Mexico**, 20.5 million ounces of pure silver were used in the production of commemorative coins for collectors. More recently, to the delight of investors, Mexico minted the first modern silver bullion coins, denominated in terms of its silver content—the one ounce pure silver "Onza" and "Libertad" coins. *Each issue sold out.*

In 1986, **Japan** used 6.4 million ounces of pure silver to commemorate the 60th Anniversary of the Reign of Emperor Hirohito. And *this mintage too* was a sell-out. Thus, **in 1986 alone, the United States and Japan minted and sold 18 million troy ounces of just three silver coins to eager collectors and investors.**

Why have there been so many "sell-outs" of silver coins?

Since the beginning of recorded history, silver has served as money—a trusted store of value. And traditionally, countless persons have "hoarded", "collected" or "invested" in silver coins.

A recent survey indicated that there are at least 8.6 million coin collectors/investors in the USA today. They and their counterparts in other nations have created "sell-out" situations—and there is no reason why they shouldn't continue to buy even larger quantities of silver coins in the future if certain factors are present.

What do the "sell-out" coins have in common?

All of their designs are very attractive. They portray genuinely popular national or international themes, events, or personages. All are legal tender coins. They are competitively priced. Each coin has been expertly promoted and its availability and liquidity have been assured through the establishment of appropriate wholesale and retail distribution channels.

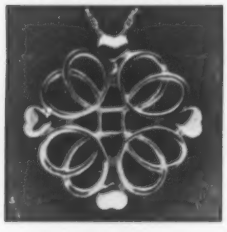
SILVER INSTITUTE SPARKS DEMAND FOR SILVER JEWELRY

During recent years The Silver Institute and several of its members have championed the dramatic beauty and fashion values of today's sterling silver jewelry. And for the first 9 months of 1986 the Bureau of Mines reports that the **use of silver in jewelry in the United States has increased 35% to 5.8 million ounces, the highest usage in nine years.**

Institute member Tiffany & Co., 5th Avenue & 57th Street, New York, NY 10022 has carried the banner of high fashion sterling silver jewelry designed by "name designers" such as Paloma Picasso and Elsa Peretti—and Tiffany's success is already legendary.

After looking at Tiffany's Fall Selections there is no reason to wonder why Tiffany is so successful. There is something to satisfy the tastes and pocketbooks of anyone who is interested in buying jewelry. Everything from the adorable sterling silver Teddy Bear sporting a 14K gold bow tie, to Elsa Peretti's heart bookmark to a heart key ring and tag, to the timeless and serious beauty of Tiffany's leaf necklace, pendants, ear-clips, and pins pictured above.

Working in other fields, Institute member **Sunshine Mining Co.** is busy creating a wide variety of jewelry pieces which incorporate Sunshine's bullion round in their designs. And most recently, it has produced the pictured reproduction of an 18th century "Endless Knot of Love" pendant, exquisitely crafted from a single band of the purest silver. Each loop in this Endless Knot of Love becomes part of a graceful succession of hearts.



This sterling silver Endless Knot of Love can be ordered for only $39.50 each from Sunshine Bullion Co., 8350 No. Central, Suite M-1070, Dallas, Texas 75206

LONG LIVE THE NEW "NEW SILVER TECHNOLOGY"!

In October 1973, the Silver Institute decided to launch a quarterly publication covering the world's most promising new developments in silver technology. The result was a new publication called *"Silver Abstracts"*, distributed without charge to those who asked to be put on its mailing list.

But within a few months, the name changed to ***"New Silver Technology — Silver Abstracts from the World Literature"***. And in January 1975, following major increases in the number of recipients, the Institute started charging a token price of $25 for an annual subscription to this quarterly. The members paid this token price until July 1981 when it was increased to $30. Five years later it was raised to a still below-cost price of $45.

Based on financial considerations and a survey of reader preferences, in December 1986 the decision was taken to change *New Silver Technology (NST)* to a monthly publication and increase its subscription price to $275. **Fortunately, many firms and individual researchers decided that *NST* is still the most economical way of staying on the cutting edge of ever-changing silver technology**. So they subscribed to the new monthly *NST*, enabling it to provide them with monthly one-page summaries of the 10 most important developments in silver technology and a monthly listing of all significant papers and patents on silver. **Subscriptions and additional information may be obtained from the Institute's Washington offices.**

NEW SILVER SUPER LENS FOR CAMERAS AND ...

Dr. Duncan T. Moore, The Institute of Optics, examining new silver lens.

A recently discovered silver treatment of lenses can reduce the number of glass elements in cameras, binoculars and optical devices by 50%.

The new system in which silver atoms penetrate the glass, results in a lens with a light-bending capability that normally requires two or more lenses. This new system has been developed by **Professor Duncan T. Moore**, pictured at left, **University of Rochester** Institute of Optics, Rochester, N.Y. 14627.

In some systems as many as 13 color-correcting lenses are now needed in order to achieve a sharp, clear photograph. Now **commonly used optical lenses can be replaced by half the number of silver-treated light-bending lenses**. Thus, the new system can reduce both the size and the weight of binoculars, cameras, and "zoom" lenses.

MEXICO PROMOTING PROOF "LIBERTADS" AND IMPROVED SILVER PRODUCTION

Officials of the Banco de Mexico recently announced the official release of the long-awaited 1986 proof issue of their popular Libertad silver bullion coin. Only 30,000 coins have been struck for worldwide distribution.

Mexico's Libertad is one of the most popular 1-ounce pure silver bullion coins. Since its introduction, more than 5,000,000 of these bullion coins have been sold. But the 1986 proof Libertad represents Mexico's first major foray into the annual issue proof-coin market.

Bruce Kaplan, Senior Vice President of Mexico's exclusive wholesaler of proof Libertads, **A-Mark Precious Metals, Inc.**, P.O. Box 5501, Beverly Hills CA 90210, stated, "We expect the coin to sell out within two weeks of its release and distribution."

Silver from TANE of Mexico—highest quality sterling.

"In addition," according to Pedro Sanchez Mejorada, President of Silver Institute member firm **Industrias Penoles, SA de CV**, of Mexico City, Mexico, "Executives of Mexican mining smelting and refining companies are working with the Pedro Leites, President of the leading Mexican silverware producer, **TANE**, to increase the production and sales of sterling silver products."

Mr. Sanchez Mejorada stated, "In order to increase production of high quality sterling silverware with internationally attractive designs, a new training center for Mexican artisans is being established in Zacatecas, Mexico."

And in order to supply small Mexican silver shops with a high quality sterling silver sheet to use in manufacturing jewelry and other sterling products, he added, "We are considering the production of sterling sheet under strict quality control," and concluded, "Once quality control is established, we believe that the demand for Mexican silverware abroad will be greatly increased."

READERS SUPPORT "SILVER INSTITUTE LETTER"

Recently a large random sample of *Silver Institute Letter* readers were told that during the past fifteen years The Silver Institute has given free subscriptions to all who have asked for it. They were also advised that in the future the Institute will continue paying for the editorial, printing and most of the mailing costs of the *Letter*.

However, in addition, readers were asked to share part of the Institute's mailing costs. Subscribers were also told that the *Letter* will continue to carry many of its traditional stories, but it will also include more silver investment-oriented topics. Readers were then given the opportunity to indicate their degree of interest on different topics by completing a ***Silver Institute Letter*** questionnaire.

Hundreds of readers sent in their checks and have taken the time needed to answer our survey. Our readers showed a high degree of interest in all topics and many of them wrote comments on the survey forms. Over 90% of the comments, including the following were very supportive: "Your information is excellent and should be published monthly." . . . "We do enjoy your letter, many thanks!" Excellent! Keep up the good work." "Great publication."

And then there was the gentleman from Uetikon am See, Switzerland, who sent the Institute a check for $60, together with a note, "Use this in the coming years."

To make sure you receive future issues of The Silver Institute Letter, and have the opportunity to help determine the future contents of your Letter, please fill in the form below and send it along with your completed questionnaire (attached) and check (made payable to The Silver Institute).

____ Enclosed is my check for US $9.00 (*within* the United States).

____ Enclosed is my check for US $12.00 (*outside* the United States).

Name: _____

Address: _____

City: _____

WORLD REFINERY PRODUCTION OF SILVER CONTINUES TO DECLINE

As shown below, despite a slight end-of-the-year surge, U.S. refinery production from ores and concentrates was 30% less in 1986 than in 1985, and indeed 30% less than the average of the past five years. Refining of old scrap was also down 12% from 1985, and 33% under the average of the past 5 years. On the other hand, new scrap, generated during manufacturing processes, was up by 14% during 1986. This indicates an increase in the production of silver products in the United States.

Participants in the Silver Institute refining series outside the U.S. also show a decrease in refinery production from all sources of 2% from 1985.

	TROY OUNCES		MILLION TROY OUNCES		
	DECEMBER 1986	NOVEMBER 1986	Jan-Dec 1986	Jan-Dec 1985	Full Year 1985
THESE REFINERS' PRODUCTION, BY SOURCE			MONTHLY RATE		
From Primary (ores & concentrates)	3,746,264	3,531,888	2.9	4.1	4.1
From Coins	0	0	0.0	0.0	0.0
From Old Scrap (used photo film & other products)	2,085,683	2,334,118	2.2	2.5	2.5
From New Scrap (in-plant clippings, waste)*	4,365,169	2,350,295	2.4	2.4	2.4
TOTAL PRODUCTION	10,197,116	8,216,301	7.5	9.1	9.1
DISPOSITION BY THESE REFINERS					
Converted in Plant (consumed in fabricating, etc.)	5,821,746	4,099,031	4.0	3.8	3.8
Shipped Out as 999 Silver	5,112,978	3,943,378	3.4	5.6	5.6
TOTAL DISPOSITION	10,934,724	8,042,409	7.5	9.4	9.4
RESULTING CHANGE OF THESE REFINERS' STOCKS (Production Minus Disposition)	−737,608	173,892	TOTAL FOR PERIOD 0.3	−3.8	−3.8
THESE REFINERS' STOCKS AT END OF PERIOD	360,642	1,098,250	0.4	0.1	0.1

Production and Disposition of **999 Silver** by All Known Refiners in Australia, Canada, Mexico, Peru, South Africa, Sweden, and West Germany; and some other Refiners in Europe and Asia.

	TROY OUNCES		MILLION TROY OUNCES		
	DECEMBER 1986	NOVEMBER 1986	Jan-Dec 1986	Jan-Dec 1985	Full Year 1985
THESE REFINERS' PRODUCTION, BY SOURCE			MONTHLY RATE		
From Primary (ores & concentrates)	13,432,535	14,670,291	13.7	13.9	13.9
From Coins	8,319	471,481	0.3	0.1	0.1
From Old Scrap (used photo film & other products)	3,695,330	4,251,510	3.7	4.0	4.0
From New Scrap (in-plant clippings, waste)*	771,404	862,194	0.8	0.9	0.9
TOTAL PRODUCTION	17,907,558	20,255,476	18.5	18.9	18.9
DISPOSITION BY THESE REFINERS					
Converted in Plant (consumed in fabricating, etc.)	1,922,767	2,204,205	1.7	1.4	1.4
Shipped Out as 999 Silver	17,253,269	18,692,489	17.0	17.3	17.3
TOTAL DISPOSITION	19,176,036	20,896,694	18.7	18.7	18.7
RESULTING CHANGE OF THESE REFINERS' STOCKS (Production Minus Disposition)	−1,268,448	−641,218	TOTAL FOR PERIOD −2.8	2.4	2.4
THESE REFINERS' STOCKS AT END OF PERIOD	4,934,562	6,203,010	4.9	7.7	7.7

*PRODUCTION From New Scrap is 999 silver made from in-plant clippings, spillage, sweepings, etc., generated during manufacturing process.

THE SILVER INSTITUTE
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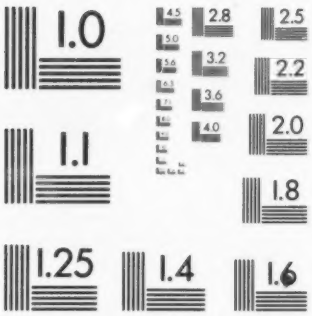

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THE SILVER INSTITUTE LETTER

WORLDWIDE INFORMATION ON SILVER

VOLUME XVII NUMBER 2 APRIL 1987

UNITED STATES MINT INCREASES SILVER EAGLE PRODUCTION TARGET

Demand for the beautiful U.S. one-ounce silver American Eagle bullion coins continues to soar. **As a result, the U.S. Mint increased its 1987 production target to between 18 and 24 million coins, said Mint Spokesperson, Eugene Essner.**

Silver American Eagle

Last year, the Mint sold 5.1 million of its 1986 silver Eagle coins. By March 23, 1987, it had sold 2.8 million newly struck 1987 silver Eagle bullion coins to its primary distributors, bringing its total sales to 7.9 million silver bullion coins in less than four months.

The U.S. Mint is still selling "all of the silver Eagles that it can produce," but it is having difficulty in raising its production level because of a shortage of silver blanks, or "planchets". It is now negotiating with the two private companies that supply the blanks to increase production to 450,000 blanks weekly.

"If the U.S. Mint is able to reach even the lower end of its new projection, the 1987 silver Eagle coins will consume 18 million troy ounces of pure silver and become an even more important demand factor in silver's supply and demand equation," said John H. Lutley, Executive Director of The Silver Institute.

"For example," he added, **"the silver Eagle coin program would then be consuming more silver than the 17.4 million ounces used in 1986 by all of** the Electroplated Ware, Sterlingware, Jewelry, Dental and Medical Supplies, Mirrors, and Bearings Industries of the USA."

He concluded, "The obvious success of this coin program shows that the silver Eagle bullion coins are satisfying a tremendous, global demand by coin collectors and investors for attractive U.S. legal tender silver bullion coins."

TOTAL U.S. CONSUMPTION OF SILVER INCREASED 14% IN 1986!

In 1986, while U.S. mine production of silver, secondary recovery, and imports of silver were falling 13% below 1985 levels, **the U.S. increased its usage of silver by 14%, from 119.0 million troy ounces in 1985 to 135.5 million ounces in 1986** according to the latest statistics released by the Bureau of Mines and the U.S. Mint.

This is the second consecutive year that U.S. demand for silver has increased from the previous year. In 1986 **the five leading users of silver, in their order of importance, were:** Photography (down 4%)--Electrical Contacts and Conductors (up 9%)--Jewelry (up 31%)--Coinage (up 1,350%)--and Brazing Alloys and Solders (up 14%).

The following table shows **U.S. Consumption of Silver by End Use.** It is based on data provided by the **Bureau of Mines and the U.S. Mint:**

	Millions of Troy Ounces			
End Use	1984	1985	1986	% Change from 1985
Electroplated Ware	3.5	3.7	2.9	-22
Sterlingware	3.6	3.5	3.9	+11
Jewelry	5.8	5.8	7.6	+31
Photgraphic Materials	55.3	57.9	55.4	-4
Dental & Medical Supplies	1.5	1.5	1.5	-
Mirrors	1.0	1.0	1.0	-
Brazing Alloys & Solders	5.9	5.6	6.4	+14
Electrical & Electronic Products				
Batteries	2.7	2.5	3.7	+48
Contacts & Conductors	25.6	27.5	30.1	+9
Bearings	.3	.2	.4	+100
Catalysts	2.4	2.4	2.3	-4
Commemorative Objects	2.6	2.5	4.1	+64
Miscellaneous	4.6	4.6	4.6	-
Coinage	2.0	.8	11.6	+1,350
TOTAL CONSUMPTION	116.8	119.5	135.5	+14

JEWELERS SAY SILVER JEWELRY IS HERE TO STAY!

The consumption of silver by the Silverware and Jewelery Industries is a very important demand factor for the silver industry. For example, **in 1977, just ten short years ago, these U.S. industries used 32.0 million ounces of silver, representing over 21% of industrial demand for silver in the United States and 32% of the 100 million ounces of silver used throughout the world by the Silverware and Jewelry Industries.**

Then, worldwide demand for Sterlingware and Silver Jewelry dropped to less than 50 million ounces and only began its come-back in 1985.

And, although global figures for 1986 are not available, it is true that in the U.S., sterling silver jewelry and sterling holloware and flatware are coming back. Recently, as the statistical table on the front page of this *Silver Institute Letter* **shows, the jewelry industry increased its consumption of pure silver 32% from 5.8 million ounces in 1985 to 7.6 million ounces in 1986. And sterlingware used 11% more silver during the same period.**

In New York, **Tiffany & Co.'s** Ed Wawrynek says that Tiffany's silver business was excellent in 1986 and is very, very strong right now. He added, "Our jewelry business is particularly strong, but our flatware business is doing quite well too. In fact, Tiffany's sterling silver business--including jewelry, flatware, and giftware--during the first two months of 1987, is significantly above last year's sales for the same period."

But for the **future of sterling silver jewelry and other consumer products,** the fact that two major jewelry trade publications--the February 1987 edition of *The Goldsmith* and the March 1987 edition of *Jewelers' Circular Keystone* dedicated their covers and major editiorial space to telling their 66,000 readers "why silver jewelry's here to stay" may be of even greater impact.

In *JC-K*, senior New York editor, Lesley Gertz, says that **silver jewelry will be "more than a fashion trend that will disappear with the spring flowers" because of the following factors:**

"A major role for sterling as a ready-to-wear accessory item for career women, due to its affordable price and its versatility as both day and evening wear...A belated move by retail jewelers into the market...Refinement of the bold silver look, scaled down somewhat in size...More silver in ensembles or coordinated designs...Emphasis on silver with karat gold touches, thus raising price points and giving silver jewelry an extra touch of class...and nationwide acceptance, especially in the bigger cities."

JC-K also contained in-depth interviews with glamor jewelry manufacturers, and when questioned regarding recent silver jewelry sales growth, there were no negative responses. Some of the replies follow: "Sales in 1986 were 135% higher than in 1985. Sales increased 35% in 1985 and 40% in 1986. Sales doubled in 1985 and again in 1986."

The Goldsmith's "Market Watch", by Margaret Fields, tells jewelers that ***this once*** **limited market is now targeted to every income level and age group in all parts of the country.**

"Fashion and design is the main attraction of silver among these often overlapping, market niches--the confident, individualistic, affluent woman; the business woman; and the older woman. Though price is not of paramount importance to these prospects, price considerations--both up the scale and down it, have influenced silver jewelry's recent growth."

She also noted, "Silver jewelry can also step up a retail jeweler's fashion image. What's good enough to adorn the Giorgio Armani collection in the window of Saks Fifth Avenue is good enough for any fine jeweler." The article also provided jewelers with a section containing 10 ideas for promotions that should help them produce an even larger market for sterling silver jewelry and other silver products in 1987.

INCREDIBLE NEW BLACK-AND-WHITE SILVER T-MAX FILMS

In December 1982, *The Silver Institute Letter* reported on the use of tablet-like halide grains by Eastman Kodak Co. in the development of an extremely high-speed color negative film.

Now, Kodak has announced the incorporation of **silver "T-Grain" technology--which requires less exposure to light to accomplish sensitization**--in its new black-and-white Kodak T-Max 100 and T-Max 400 professional films.

The **Kodak T-Max 400 Professional Film is a high-speed film** for photographing dimly lit subjects or fast action, for extending the distance range for flash pictures, and for photographing subjects that require good depth-of-field and fast shutter speeds with maximum image quality.

Kodak T-Max 100 Professional Film is a medium-speed film for general outdoor and studio use.

The silver halide "T-Grains" enable both of these black-and-white films to feature very high sharpness, extremely fine grain, and a high degree of enlargement. In addition, T-Max films are compatible with popular developers, and have very similar development times.

Raymond H. DeMoulin, Vice President and General Manager of Kodak's professional Photography Division, said that these films set new quality standards for films used by thousands of the world's photo-journalists, scientists, industrial photographers, commercial illustrators, photo-educators, and law enforcement photographers.

SILVER COINS HONOR 1988 OLYMPIC GAMES

The eye-catching $20 Canadian sterling silver figure skating coin (shown at right, top), is number eight in a ten coin series that Canada has minted to support the '88 Winter Olympics to be held in Clagary, Canada.

"We like to think that the Olympic Coin program offers a way for people to personally cheer on their Olympic hopefuls," said Maurice LaFontaine, President and Master of the Royal Canadian Mint, referring to the fact that profits generated from sales of Olympic coins in 20 countries support their amateur athletes and help offset costs of Olympic facilities in Calgary. To date, **orders for over 2.2 million coins have been received.**

The eight Canadian Olympic coins are being sold for $30(US) each and are available from coin dealers and by mail from the **Royal Canadian Mint, P.O. Box 346, Station A, Ottawa, Ontario K1N 9L5, Canada.**

In March 1987, the 1988 Seoul Olympic Commemorative Silver Coin program was launched in the USA by Luis Vigdor, Senior Vice President of **Manfra, Tordella & Brookes, Inc. (MTB),** exclusive distributor of the coins in the Americas.

Mr. Vigdor introduced Shin-Joe Kang, President of the Korean Mint Corporation who described the silver coin program. "There will be **four issues of 350,000 each of four silver coins,** for a total of 16 coins in a complete set, each in proof and uncirculated finishes. Eight gold coins will also be issued."

In the first issue there are two one-ounce .925 fine silver coins depicting a marathon runner and a diver, while the two half-ounce .925 fine silver coins show **"Hodori"** (shown at right, bottom)--the centuries old tiger symbol of Korea and mascot of the Seoul 1988 Olympic Games, and a Korean-style tug of war. The reverse of all Korean Olympic coins depicts the national emblem and five roses of Sharon, symbolizing the Olympic rings.

As in the case of the Canadian Olympic coins, **the U.S. Olympic Committee will receive a percentage of the proceeds from the sale of the coins in the USA.** For further information on this program, please contact Marie Caliendo, Vice President, **MTB, 30 Rockefeller Plaza, New York, NY 10112 or call (800) 223-5818.**

NST REVEALS MOST IMPORTANT DISCOVERIES IN SILVER TECHNOLOGY

Read this, and subscribe to *New Silver Technology* today if you are interested in technical or R&D aspects of any of the following industrial activities: Alloys, automotive, brazes, batteries, catalysis, ceramics, mirroring, photoelectrics, plating, lubrication or bearings, dental or medical products, optical fibers, photography, thin films, and sterlingware.

During the past three months, experienced Silver Institute staff members have studied over 1,000 patents and reports published worldwide on the latest developments in silver technology in the above industries. **The thirty reports containing the most important developments have been converted into one page summaries. And each month, ten summaries are published in the new monthly issues of *New Silver Technology (NST).*** These reports have included detailed technical information on how new silver technology is being used to: produce better auto ignitions, maximize performance of diesel engines, increase the profitability of solar energy reflectors, and even make self-repairing, corrosion resistant dental fillings.

In addition, subscribers receive a monthly listing of all significant new silver developments with references, and reply cards to enable them to order complete backup patents or papers.

For only $275(US)--less than a dollar a day--your firm can receive this one-of-a-kind monthly report that will keep you and your company on the cutting edge of the many **new and profitable ways of using silver in your own industry.** Start your subscription today by sending your check for $275.00(US) to **The Silver Institute, Suite 101, 1026 Sixteenth Street, N.W., Washington, D.C. 20036.**

SILVER REFINED FROM OLD SCRAP CONTINUES TO DECLINE

As shown below, refining production in the U.S. was down 10% in January and February from the depressed 1986 figures, due to the continued fall in old scrap being offered for refining. Otherwise refining output was similar to the prior years.

PRODUCTION AND DISPOSITION OF **999 SILVER** BY ALL KNOWN REFINERS IN THE U.S.

	TROY OUNCES		MILLION TROY OUNCES		
	FEBRUARY 1987	JANUARY 1987	Jan-Feb 1987	Jan-Feb 1986	Full Year 1986
THESE REFINERS' PRODUCTION BY SOURCE			MONTHLY RATE		
From Primary (ores & concentrates)	2,569,277	3,359,181	3.0	3.0	2.9
From Coins	0	0	0.0	0.0	0.0
From Old Scrap (used photo film & other products)	2,120,250	2,193,007	2.2	2.8	2.2
New Scrap (in-plant clippings, waste)*	1,408,396	2,618,104	2.0	2.0	2.4
TOTAL PRODUCTION	6,097,923	8,170,292	7.1	7.9	7.5
DISPOSITION BY THESE REFINERS					
Converted in Plant (consumed in fabricating, etc.)	2,756,783	4,090,673	3.4	4.3	4.0
Shipped Out as 999 Silver	2,899,706	3,844,917	3.4	3.3	3.4
TOTAL DISPOSITION	5,656,489	7,935,590	6.8	7.6	7.5
RESULTING CHANGE OF THESE REFINERS'			TOTAL FOR PERIOD		
STOCKS (Production Minus Disposition)	441,434	234,702	0.7	0.4	0.3
THESE REFINERS' STOCKS AT END OF PERIOD	1,036,778	595,344	1.0	0.5	0.4

PRODUCTION AND DISPOSITION OF **999 SILVER** BY ALL KNOWN REFINERS IN AUSTRALIA, CANADA, MEXICO, PERU, SOUTH AFRICA, SWEDEN, AND WEST GERMANY; AND OTHER REFINERS IN EUROPE AND ASIA.

	TROY OUNCES		MILLION TROY OUNCES		
	FEBRUARY 1987	JANUARY 1987	Jan-Feb 1987	Jan-Feb 1986	Full Year 1986
THESE REFINERS' PRODUCTION BY SOURCE			MONTHLY RATE		
From Primary (ores & concentrates)	14,010,106	14,851,450	14.4	14.2	13.7
From Coins	750	0	0.0	0.2	0.3
From Old Scrap (used photo film & other products)	3,823,863	3,736,172	3.8	3.8	3.7
From New Scrap (in-plant clippings, waste)*	859,859	799,796	0.8	0.9	0.8
TOTAL PRODUCTION	18,694,578	19,387,418	19.0	19.1	18.5
DISPOSITION BY THESE REFINERS					
Converted in Plant (consumed in fabricating, etc.)	2,522,190	1,992,610	2.3	1.6	1.7
Shipped Out as 999 Silver	15,056,640	16,729,396	15.9	17.4	17.0
TOTAL DISPOSITION	17,578,830	18,722,006	18.2	19.0	18.7
RESULTING CHANGE OF THESE REFINERS'			TOTAL FOR PERIOD		
STOCKS (Production Minus Disposition)	1,115,748	665,412	1.8	0.2	-2.8
THESE REFINERS' STOCK AT END OF PERIOD	6,715,722	5,599,974	6.7	7.9	4.9

*Production from New Scrap is 999 silver made from in-plant clippings, spillage, sweepings, etc., generated during manufacturing processes.

THE SILVER INSTITUTE
A WORLDWORLD ASSOCIATION OF MINERS, REFINERS, FABRICATORS AND MANUFACTURERS
INCORPORATED 1971

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THE SILVER INSTITUTE LETTER

WORLDWIDE INFORMATION ON SILVER

VOLUME XVII NUMBER 3 JUNE 1987

EAGLES PAVE WAY FOR SILVER CONSTITUTIONAL COIN

In the opening of her speech to 150 members of the National Association of Bank Women on May 15 in Orlando, Florida, the **Treasurer of the United States, Ms. Katherine D. Ortega** said, "I would first like to mention two of Treasury's new coin programs—the American Eagle bullion coins and the Bicentennial of the Constitution coins. With the issuance of the new American Eagle bullion coins last fall, we have for the first time in our history, been able to purchase bullion coins made by the U.S. Mint.

"This program opened up new markets and new possibilities. It is a way to invest in America, to buy something that American labor and industry produces...(and) has been a worldwide success. We have sold...over 9,000,000 ounces of silver Eagles since the program began last October."

Referring to the silver $1 Constitution Bicentennial coin, she said that Treasury is excited about this coin and added, "Many of your banks will undoubtedly offer these coins to your customers."

During the week following the Treasurer's talk to the women bankers, the U.S. Mint sold 700,000 more silver Eagles, bringing 1987 silver Eagle sales up to 5,185,000. These together with the 5,096,000 ounces of silver consumed in the 1986 program brings **total cumulative sales up to 10,281,000 ounces of silver Eagles in less than six months!** To put this into perspective, the entire world used 13.4 million ounces of silver for coinage during the 12 months of 1985.

As record breaking sales of the silver Eagle continued, **the U.S. Mint was preparing for the July 1 minting of a minimum of 4 million 900-fine silver Constitutional commemorative dollars,** each of which will measure 38.1 mm and contain about three-quarters of an ounce of silver. Congress has authorized a maximum of ten million of these coins.

The retail price of this silver dollar is $28, including a $7 surcharge which will be used toward paying off the national debt. The coins will be marketed by some 17,000 financial and retail outlets.

SILVER PRICE TREND UP DURING 1987

Many of the readers of the Silver Institute Letter live in cities and towns where the local media does not provide them with more than infrequent mentions of even the word "silver." This situation was reflected in the results of our readership survey by the fact that **the second highest degree of interest of our average reader was in silver price trends and closing prices.**

In this issue, we hope to respond to this particular interest by providing a ten-year annual High, Low and Average prices for silver and similar monthly figures for 1987. This will be updated in each issue of the Silver Institute Letter.

1987 to Date	High $11.25	Low $ 5.35	Average $ 6.51
May 87	9.52	7.35	8.44
Apr. 87	11.25	6.23	7.36
Mar. 87	6.39	5.41	5.70
Feb. 87	5.54	5.37	5.49
Jan. 87	5.70	5.35	5.54
Year	**High**	**Low**	**Average**
1986	6.19	4.87	5.46
1985	6.73	5.57	6.14
1984	10.03	6.26	8.14
1983	14.74	8.34	11.44
1982	11.21	4.88	7.94
1981	16.45	7.95	10.51
1980	48.00	10.80	20.63
1979	28.00	5.96	11.09
1978	6.29	4.82	5.40
1977	4.96	4.30	4.62

SILVER INDUSTRY LEADERS TO VISIT TIFFANY & CO.

Representatives of the more than 90 corporate members of The Silver Institute will come from as many as 20 countries to hold the Institute's 16th Annual General Meeting on June 25, 1987 at the Yale Club in New York City.

Following the Meeting, Silver Institute member, Tiffany & Co. has invited members and their spouses to participate in the celebration of Tiffany's 150th anniversary by visiting its 5th Avenue store where its famous Silver Department routinely displays over 1,000 different silver items, ranging from sterling silver golf clubs to its ornate 19th century classic "Chrysanthemum" letter box.

INTERNATIONAL CONFERENCE REVEALS NEW BENEFITS OF SILVER

For the first time, physicians and biochemists conducting research into the medical effects of silver met in a formal conference, in Bethesda, Maryland, cosponsored by The Silver Institute. This Conference on Silver and Gold in Medicine attracted researchers from Europe and all over North America. It focused on three primary uses of silver in medicine:

- Silver as the most sensitive stain in identifying specific proteins which are indicators of disease,
- Silver as the additive which improves the effectiveness of pharmaceutical compounds against bacteria, and
- Silver as an electrically generated ion which causes bone and skin tissue regeneration with bactericidal protection, which may have pharmaceutical manufacturing potential.

"The use of silver," stated Dr. Carl R. Merril, National Institute of Mental Health, "Allows us to detect as little as one billionth of a gram of protein. Detection at such low levels is critical for correct diagnosis of specific diseases. For example, this technique can positively identify the presence of schizophrenia, Parkinson's disease, Herpes encephalitis, and the Jacob-Creutzfeld brain degeneration disease."

Dr. Charles L. Fox, Columbia University, who compounded silver with sulfadiazine to achieve one of the most successful pharmaceuticals ever developed for burn care, reviewed research into a new family of compounds. "We found that certain new quinolones such as Norfloxacin, Pefloxacin, and Enoxacin were highly effective *in vivo* against infections. By adding silver, these bactericidal compounds not only acquired antifungal properties, but inhibited the development of bacterial strains that would otherwise be resistant to them."

"Silver ions released from a solid metallic surface or produced by dissociation of a silver compound are bactericidal," stated Dr. Robert O. Becker. "However, the technique of electrically generating these ions offers additional advantages." Not only do the electrically generated ions offer superior bactericidal control of wounds under extremely difficult clinical conditions, but the rate of healing is increased at least twofold. Becker discovered this was due to greatly increased tissue regeneration. Silver causes the fibroblasts, nature's reparative cells, to increase their production rate and so hasten healing of bone and tissue.

Dr. Arthur B. Flick, a specialist in orthopaedic surgery and rehabilitative medicine, confirmed that silver does indeed cause tissue and bone regeneration, while at the same time inhibiting bacterial growth—the only substance to do so. He proposed this regenerative propensity of silver should receive greater attention by the pharmaceutical industry.

The Proceedings of the Conference are now in preparation and will be available for $80 from the Institute's Administrative Office.

LATEST DEVELOPMENTS IN SILVER TECHNOLOGY REPORTED

During the past 12 years, ***New Silver Technology (NST)*** has been—and still is—the only comprehensive source of hard information on the newest and most important technology of silver.

Just a few of the important developments reported in the March and April issues of NST are:

- Silver brazes achieve the strongest bonds between protective ceramic parts and metal automotive engine components to provide high-temperature operating efficiency.
- Powder metallurgical production processes are enhanced by a new silver-alloy powder produced by zinc sublimation, providing high green or pre-sintered strength with excellent particle size distribution.
- Infection-resistant polymers for use as surgical implants, wound dressings, and hospital clothing and drapes can be made with new silver-based compounds.
- A new silver-polymer electrical contact material exhibits remarkably high resistance to arc erosion even at several hundreds of amperes.

The April issue included ten one-page summaries of developments of silver technology in the fields of alloys, bonding, catalysis, contacts, medical, optical materials, photography and solar energy. In addition, this issue contained **99 digests of other silver technological developments in 25 fields of research.**

Your organization can access accurate up-to-date information on important silver technological developments and new uses of silver by subscribing to NST for only $US275 for 12 issues. Send your check to **The Silver Institute,** Suite 101, 1026 Sixteenth Street, N.W., Washington, DC 20036.

SILVER AND GOLD SHOW BEST RETURNS IN PAST 12 MONTHS

A recent report from Salomon Brothers Incorporated shows silver, gold, and oil provided the best investment returns in the past 12 months, **with silver yielding a top-rated 40 percent.**

Over the past 15 years silver showed a compound annual rate of return of 10.3 percent—well above both stocks at 8.6 percent and bonds at 8.7 percent.

Compound Annual Rates of Return

	15 Years	Rank	10 Years	Rank	5 Years	Rank	1 Year	Rank
U.S. Coins	18.8	1	16.3	1	11.4	3	10.7	6
Oil	13.9	2	3.0	13	(11.8)	14	27.4	3
U.S. Stamps	13.6	3	11.8	3	(1.3)	12	0.5	14
Gold	11.9	4	9.2	8	6.8	7	29.1	2
Silver	10.3	5	9.7	6	4.0	9	39.8	1
Treasury Bills	9.2	6	10.2	5	8.5	6	5.7	11
Old Masters[a]	9.2	7	9.7	6	9.5	5	8.6	7
Stocks	8.6	8	13.9	2	24.1	1	20.6	5
Bonds	8.7	9	9.7	7	19.7	2	5.7	12
Chinese Ceramics[a]	8.3	10	11.3	4	3.4	11	6.7	10
Housing	8.2	11	7.4	10	4.8	8	6.8	9
CPI	**6.9**	**12**	**6.5**	**11**	**3.5**	**10**	**3.8**	**13**
U.S. Farmland	6.3	13	1.5	14	(7.8)	13	(7.9)	15
Foreign Exchange	4.6	14	4.1	12	6.8	7	25.0	4
Diamonds[b]	4.1	15	8.9	9	10.2	4	7.0	8

[a]Source: Sotheby's. [b]Source: The Diamond Registry. CPI Consumer Price Index.

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Note: All returns are for the period ended June 1, 1987, based on latest available data.

WHAT DO PANDAS, POPOCATEPETL, BISONS, PROSPECTORS, AND SUNSHINE HAVE IN COMMON?

For those that feared that the silver Eagle bullion coin would monopolize the U.S. market for silver bullion, this is one fear that they can forget because all of the headline subjects—and many more—are now featured on one or more pure silver medallions—or rounds, if you prefer—and sales of all are booming!

The **People's Republic of China** sold out of its 5-ounce pure silver medal commemorating its participation in the Ninth Summer Numismatic and Philatelic Expo, June 4–7, in Long Beach, CA. It features a Panda on one side and the skyline of downtown Long Beach on the other.

The **Casa de Moneda de México** has minted a 5-ounce medallion of 99.9% pure silver commemorating the legend of "The Volcanos" and depicts the famous Ixtaccihuatl (Lady in White) and Popocatepetl, two legendary lovers that were transformed into volcanos, forever watching over each other and the people of the Valley of Mexico City with love.

And in **South Dakota, the state government** has authorized a 99.9% pure silver bullion round depicting two plains bison on one side and the state seal on the other. This attractive bullion piece is offered in ½ ounce, 1 ounce, 5 once and 10 ounce sizes at the spot price of silver plus a small premium. To order, call Tri-State Mint (800) 843-9854.

Insofar as **Engelhard's** line of pure silver American Prospector rounds and other silver investment products are concerned, the company has enjoyed "a dramatic increase in demand since the first of the year." Call (800) 526-7680 for more information.

Another established silver round is the pure silver "Sunshine" round, minted by **Sunshine Bullion Co.** in Dallas, Texas and it has profited by an "overwhelming demand" during the past two months. To order "Sunshine" rounds, call (800) 527-5769.

SILVER INSTITUTE LETTER READERS HELP PAY MAILING COSTS

The majority of ***Silver Institute Letter*** readers responded to our February 1987 appeal for them to share part of the Institute's cost of mailing out the ***Letter*** and to guide us in determining the future content of this ***Letter.***

All of the readers who sent us their checks for U.S. $9 (or U.S. $12 outside the USA) also participated in the June 8 Silver Drawing. The ten lucky winners will be notified by mail and are also listed below: MTB 1 Ounce pure silver Liberty bar: Jerome Smith, New York, NY. Johnson Matthey 1 ounce pure silver Freedom of Speech medallion, Jose Flores, Hartsdale, NY. Canadian 1986 silver dollar, John Lacy, Elk City, NV. Engelhard 1984 and 1985 pure silver American Prospector medallions: Tim Hirthe, Cudahy, WI; Henry Yap, Hong Kong; Dirk Brink, South Africa; B.C. Thompson, Washington, D.C. Sunshine Bullion Co. pure silver 1 ounce commemorative rounds: Richard Wyman, Boulder City, NV; Charles Higgerson, Clinton, NY; Hushyn Kasom, Amman, Jordan and John Uhdale, Reno, NV.

The results of the readership survey are enclosed as an insert in this issue of the ***Letter*** for those readers who sent in their checks and completed reader interest survey forms.

LATEST SILVER INSTITUTE REFINING STATISTICS

Production and Disposition of **999 Silver** by All Known Refiners in the United States

	TROY OUNCES		MILLION TROY OUNCES		
	April 1987	March 1987	Jan–Apr 1987	Jan–Apr 1986	Full Year 1986
THESE REFINERS' PRODUCTION, BY SOURCE			MONTHLY RATE		
From Primary (ores & concentrates)	3,432,558	3,016,853	3.1	3.1	2.9
From Coins	0	0	0.0	0.0	0.0
From Old Scrap (used photo film & other products)	3,056,706	1,477,778	2.2	2.6	2.2
From New Scrap (in-plant clippings, waste)*	1,456,296	2,554,182	2.0	2.2	2.4
TOTAL PRODUCTION	7,945,560	7,046,813	7.3	7.9	7.5
DISPOSITION BY THESE REFINERS					
Converted in Plant (consumed in fabricating, etc.)	3,568,663	3,523,039	3.5	4.3	4.0
Shipped Out as 999 Silver	4,968,188	3,440,197	3.8	3.5	3.4
TOTAL DISPOSITION	8,536,851	6,963,236	7.3	7.8	7.5
RESULTING CHANGE OF THESE REFINERS'			TOTAL FOR PERIOD		
STOCKS (Production Minus Disposition)	−591,291	85,577	0.2	0.6	0.3
THESE REFINERS' STOCKS AT END OF PERIOD	531,064	1,122,355	0.5	0.7	0.4

Production and Disposition of **999 Silver** by All Known Refiners in Australia, Canada, Mexico, Peru, South Africa, Sweden, and West Germany; and some other Refiners in Europe and Asia.

	TROY OUNCES		MILLION TROY OUNCES		
	APRIL 1987	MARCH 1987	Jan–Apr 1987	Jan–Apr 1986	Full Year 1986
THESE REFINERS' PRODUCTION, BY SOURCE			MONTHLY RATE		
From Primary (ores & concentrates)	12,824,437	14,846,529	14.1	13.5	13.7
From Coins	22,145	65,684	0.0	0.1	0.3
From Old Scrap (used photo film & other products)	3,720,895	4,191,114	3.9	4.2	3.7
From New Scrap (in-plant clippings, waste)*	785,073	905,579	0.8	0.9	0.8
TOTAL PRODUCTION	17,352,550	20,008,906	18.9	18.7	18.5
DISPOSITION BY THESE REFINERS					
Converted in Plant (consumed in fabricating, etc.)	2,325,210	2,194,085	2.3	1.7	1.7
Shipped out as 999 Silver	15,943,648	17,526,533	16.3	16.8	17.0
TOTAL DISPOSITION	18,268,858	19,720,618	18.6	18.5	18.7
RESULTING CHANGE OF THESE REFINERS'			TOTAL FOR PERIOD		
STOCKS (Production Minus Disposition)	−916,308	288,288	1.2	0.6	−2.8
THESE REFINERS' STOCKS AT END OF PERIOD	6,087,702	7,004,010	6.1	8.3	4.9

*PRODUCTION From New Scrap is 999 silver made from in-plant clippings, spillage, sweepings, etc., generated during manufacturing processes.

THE SILVER INSTITUTE
A WORLDWIDE ASSOCIATION OF MINERS, REFINERS, FABRICATORS AND MANUFACTURERS
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